

FIG.1

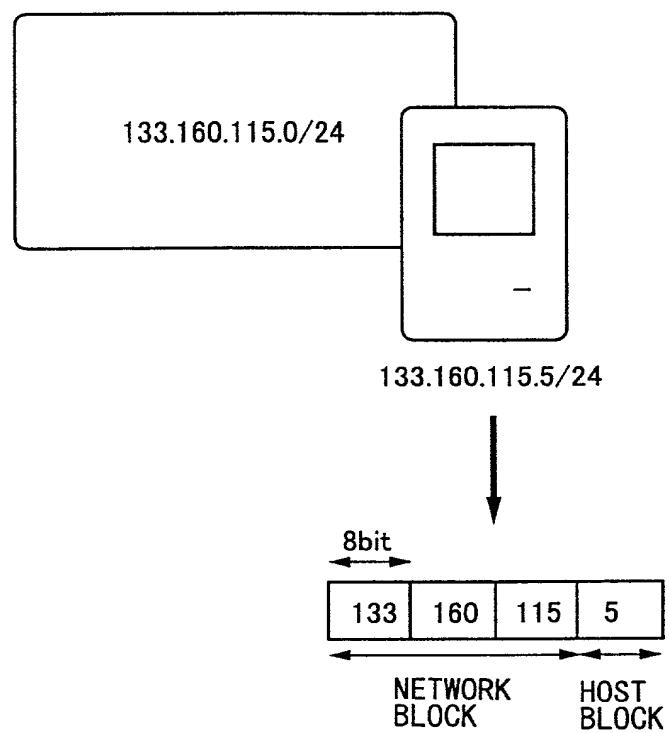


FIG. 2

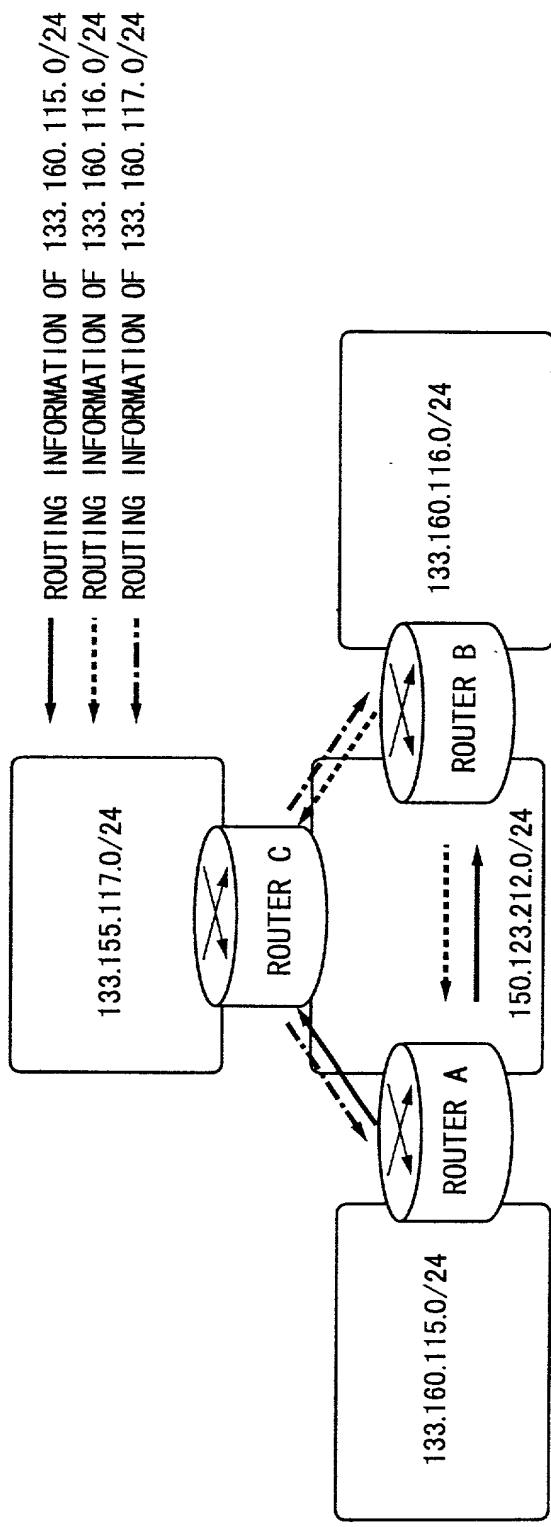


FIG. 3

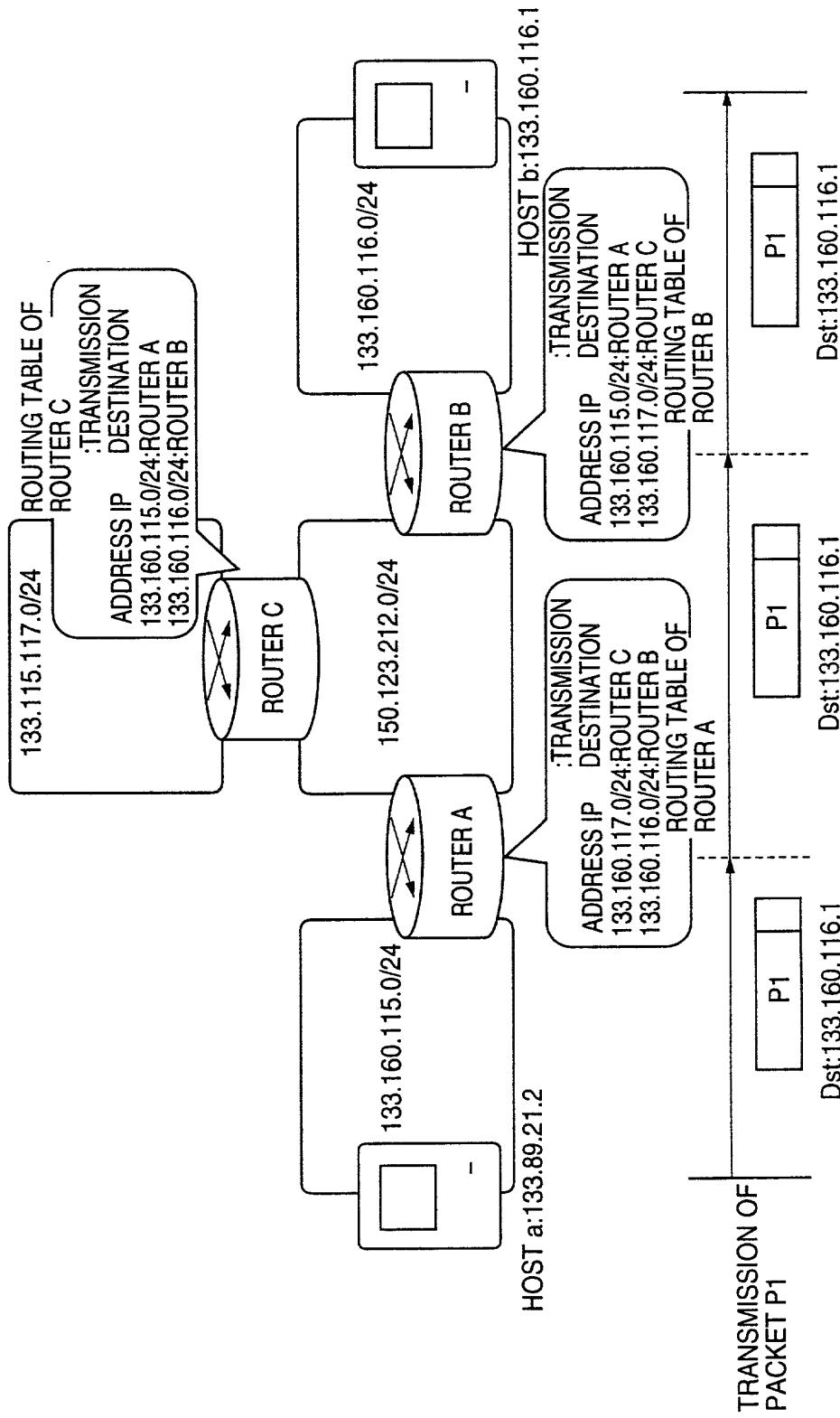
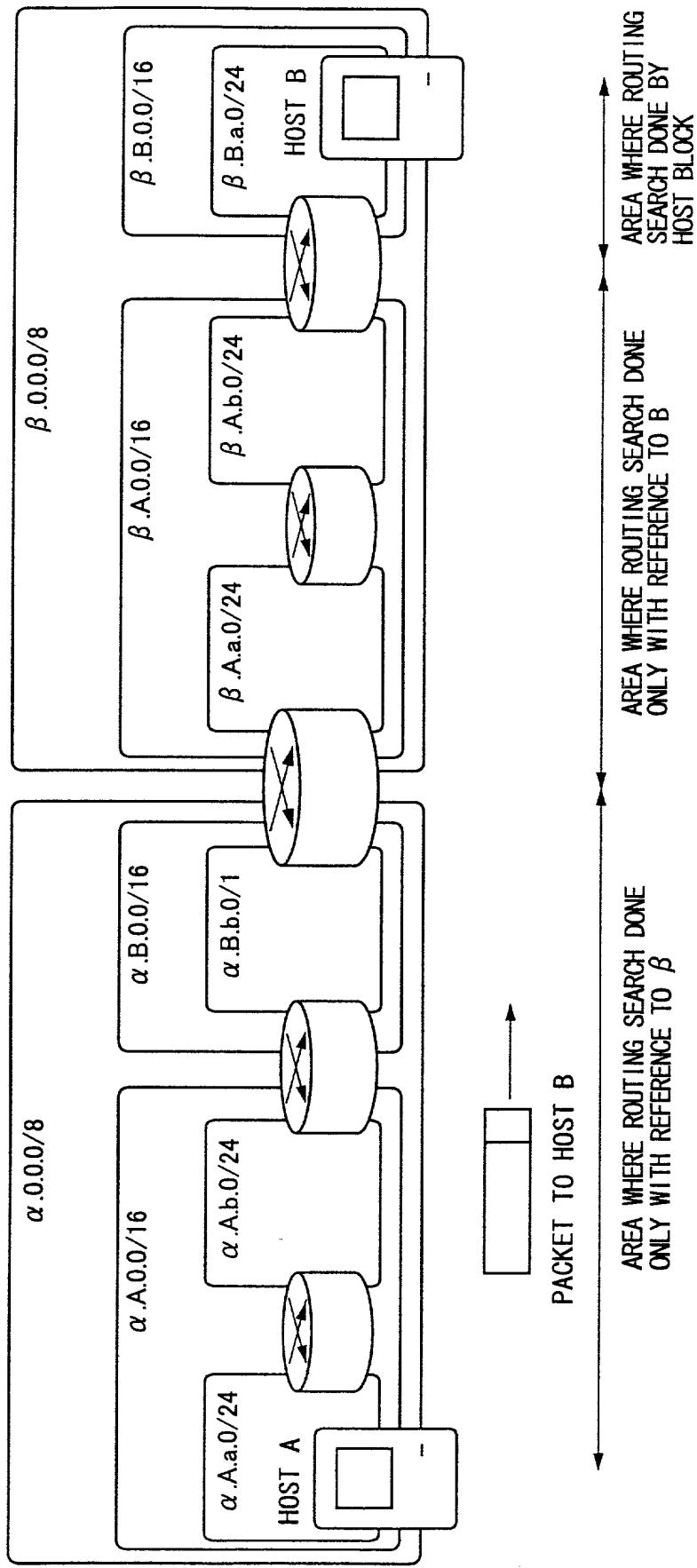


FIG. 4

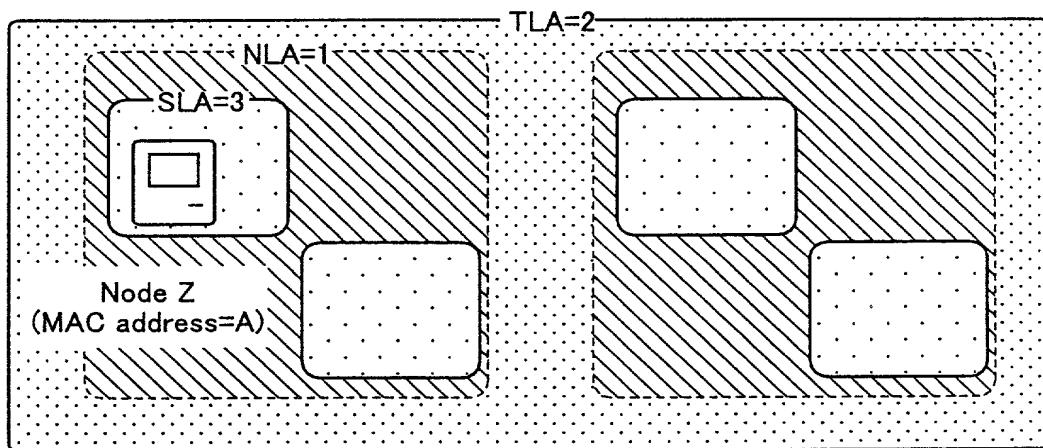


# FIG.5

3	13	8	24	16	64 bits
FP	TLA	RES	NLA	SLA	Interface ID
ID			ID	ID	

001 Format Prefix (3 bit) for Aggregatable Global  
 Unicast Address  
 TLA ID Top-Level Aggregation Identifier  
 RES Reserved for future use  
 NLA ID Next-Level Aggregation Identifier  
 SLA ID Site-Level Aggregation Identifier  
 INTERFACE ID Interface Identifier

# FIG.6



- [Dotted Box] HIERARCHY OF TLA LEVEL
- [Diagonal Lines Box] HIERARCHY OF NLA LEVEL
- [Dots Box] HIERARCHY OF SLA LEVEL

3	13	8	24	16	64 bits
FP	TLA	RES	NLA	SLA	Interface ID
ID			ID	ID	=A
=2			=1	=3	

IP ADDRESS OF NODE 2

FIG. 7

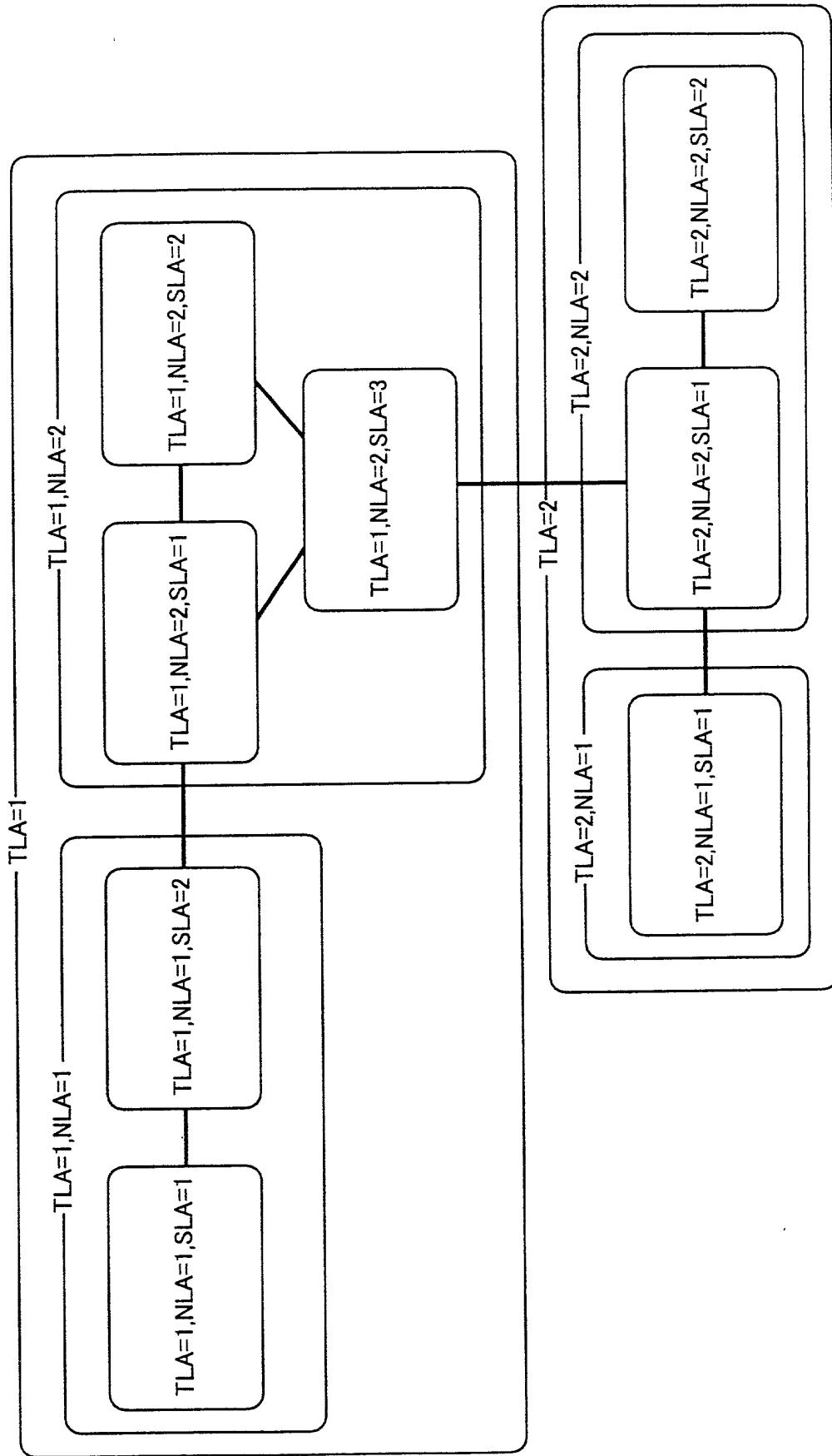
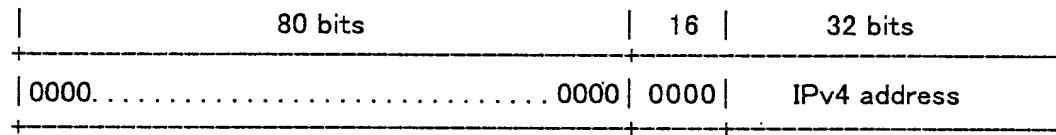
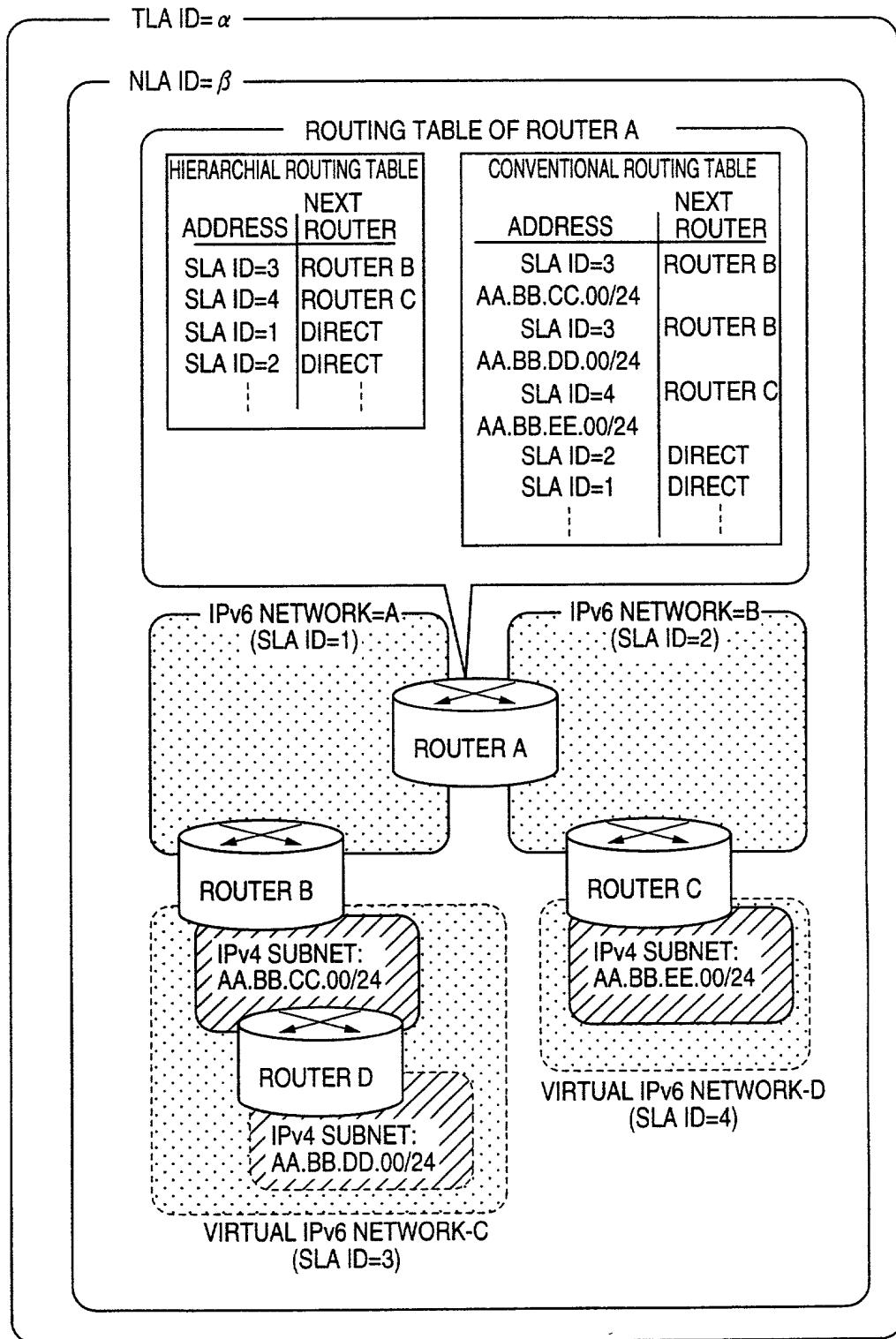


FIG.8



# FIG.9



# FIG.10

64 bits					
3	13	8	24	16	
FP	TLA	RES	NLA	SLA	Interface ID All 0
ID			ID	ID	

IPv6 NETWORK ADDRESS

64 bits					
3	13	8	24	16	
FP	TLA	RES	NLA	SLA	Interface ID 32bit=0, AA.BB.CC.0
ID			ID	ID	

IPv4 NETWORK ADDRESS

64 bits					
3	13	8	24	16	
FP	TLA	RES	NLA	SLA	Interface ID Layer2 address
ID			ID	ID	

IPv6 HOST ADDRESS

FIG. 11

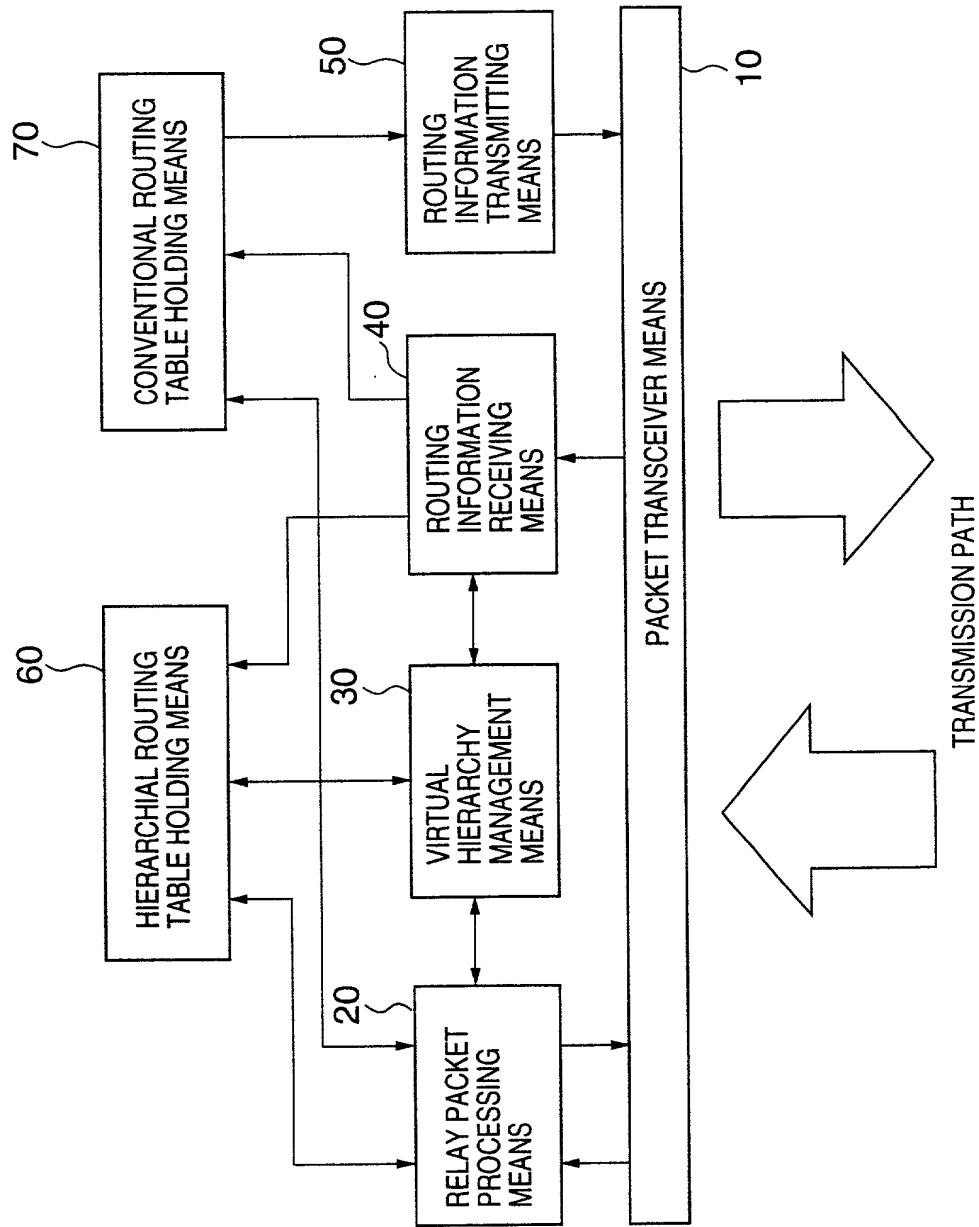


FIG.12

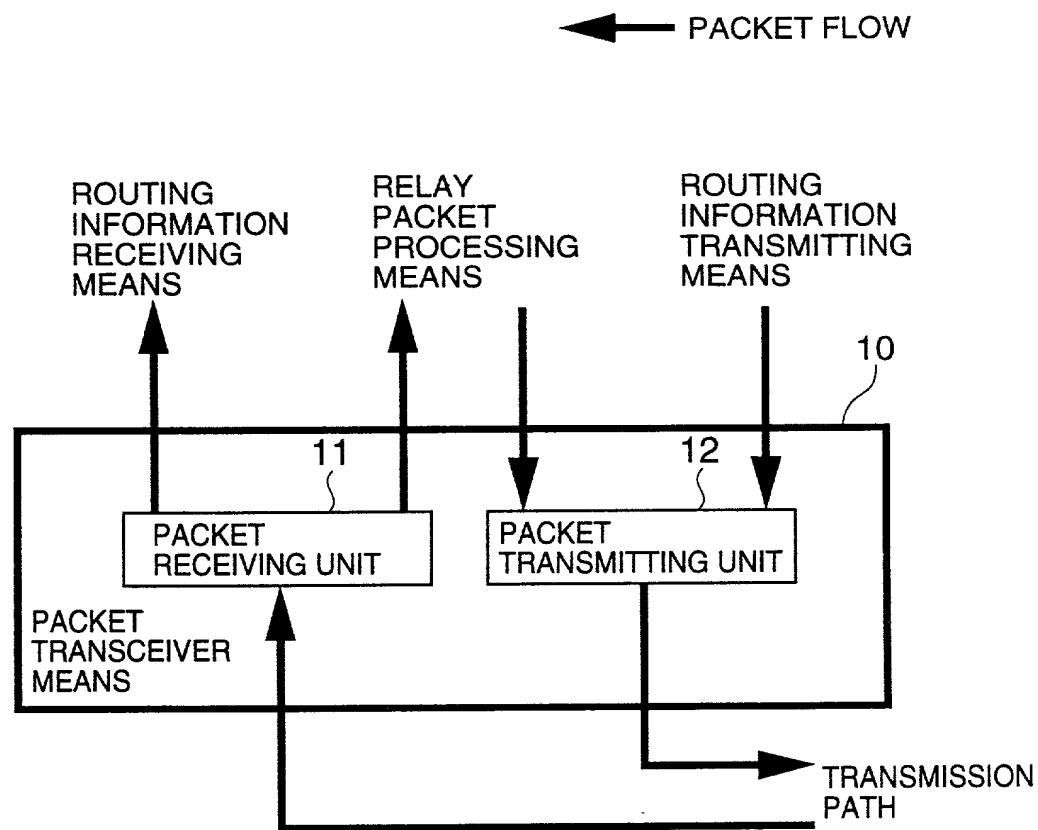


FIG. 13

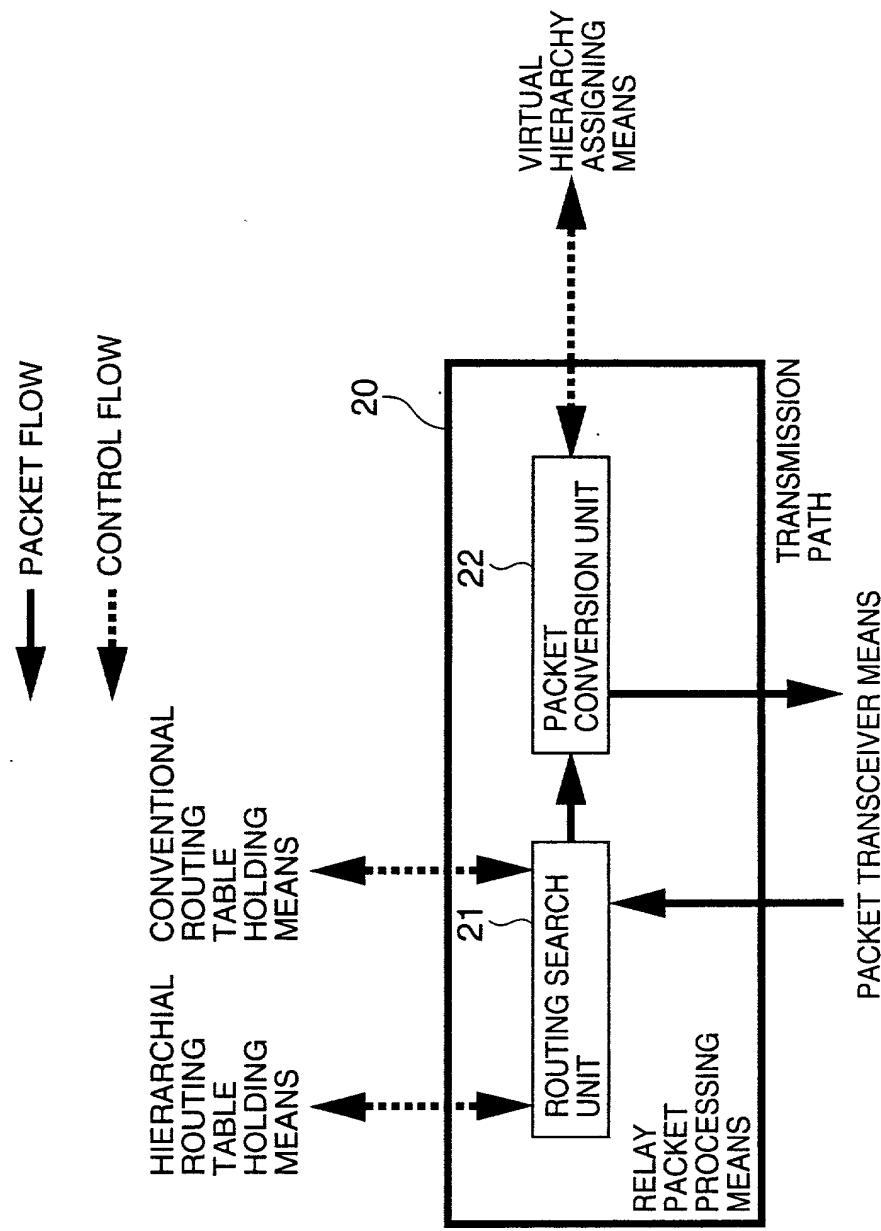


FIG.14

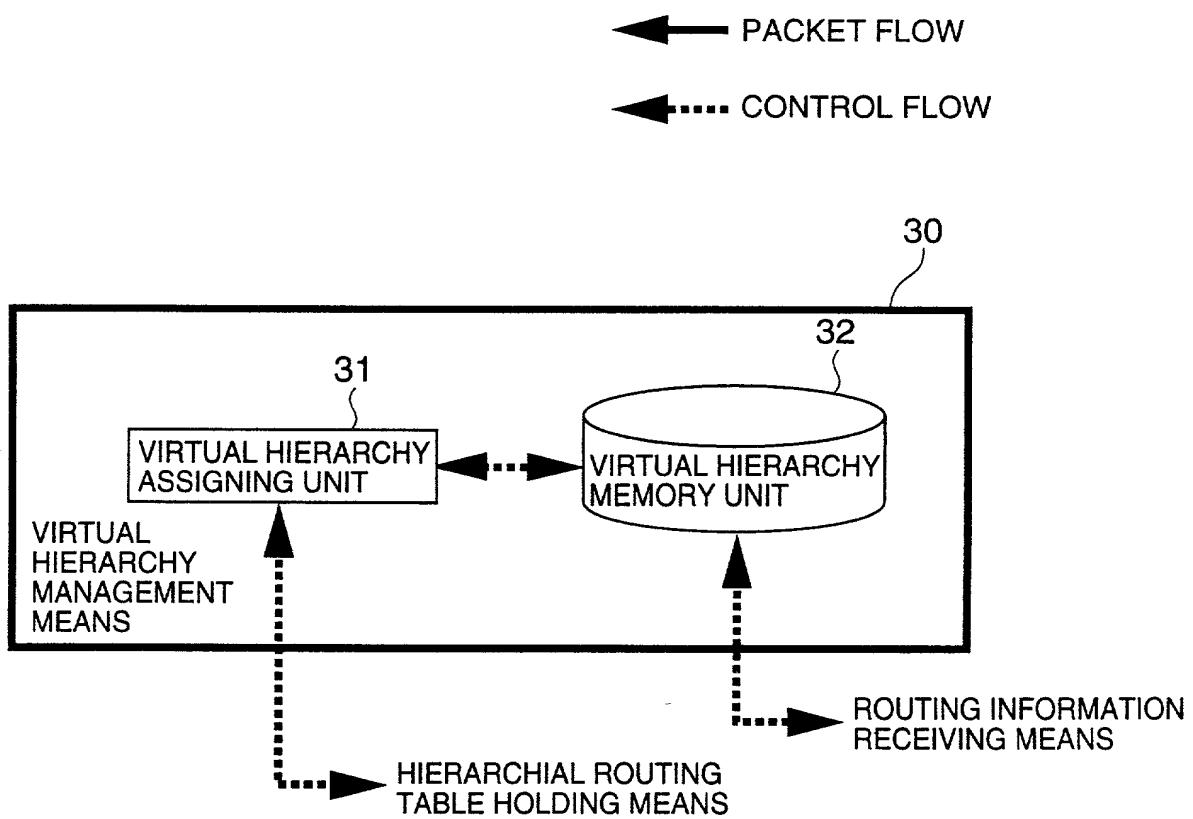


FIG. 15

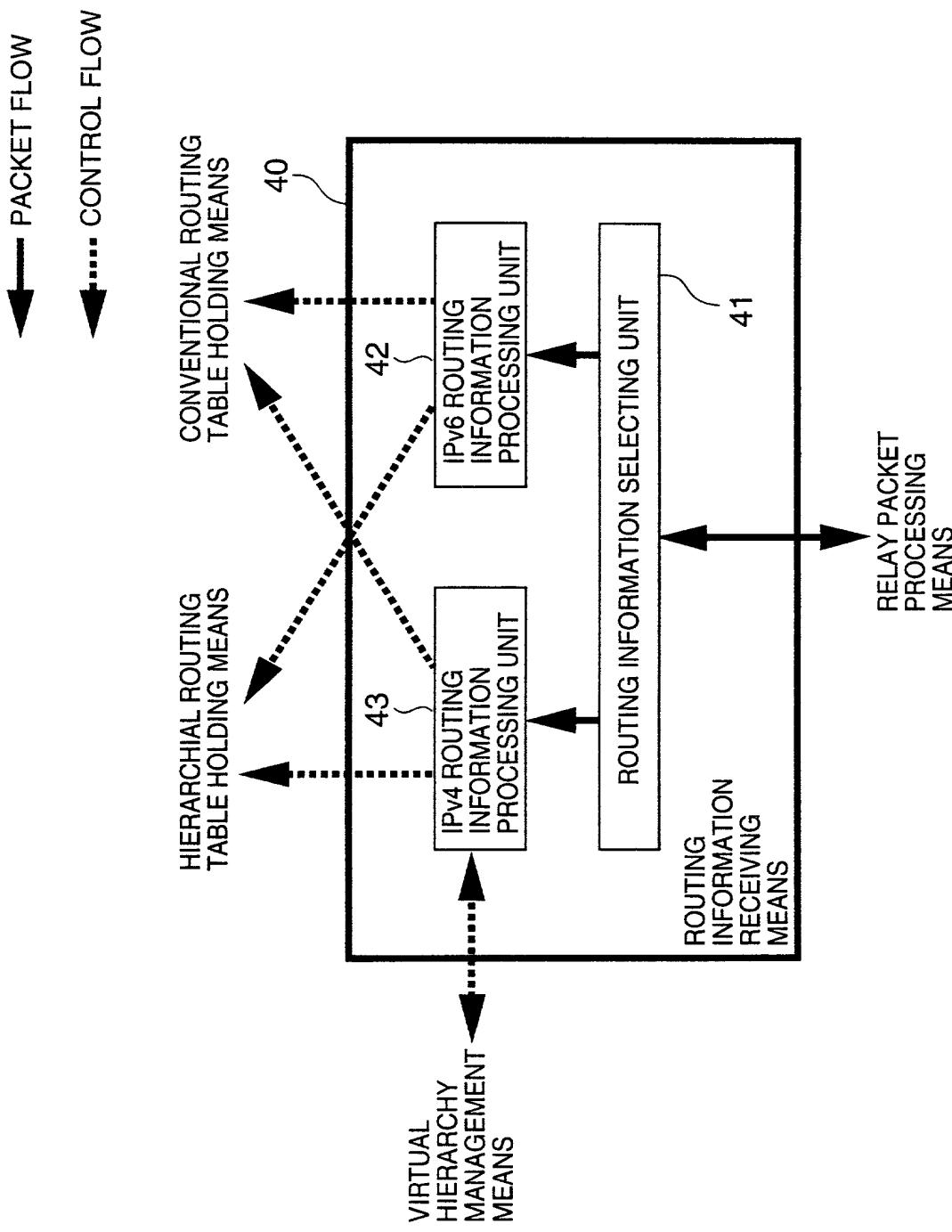


FIG.16

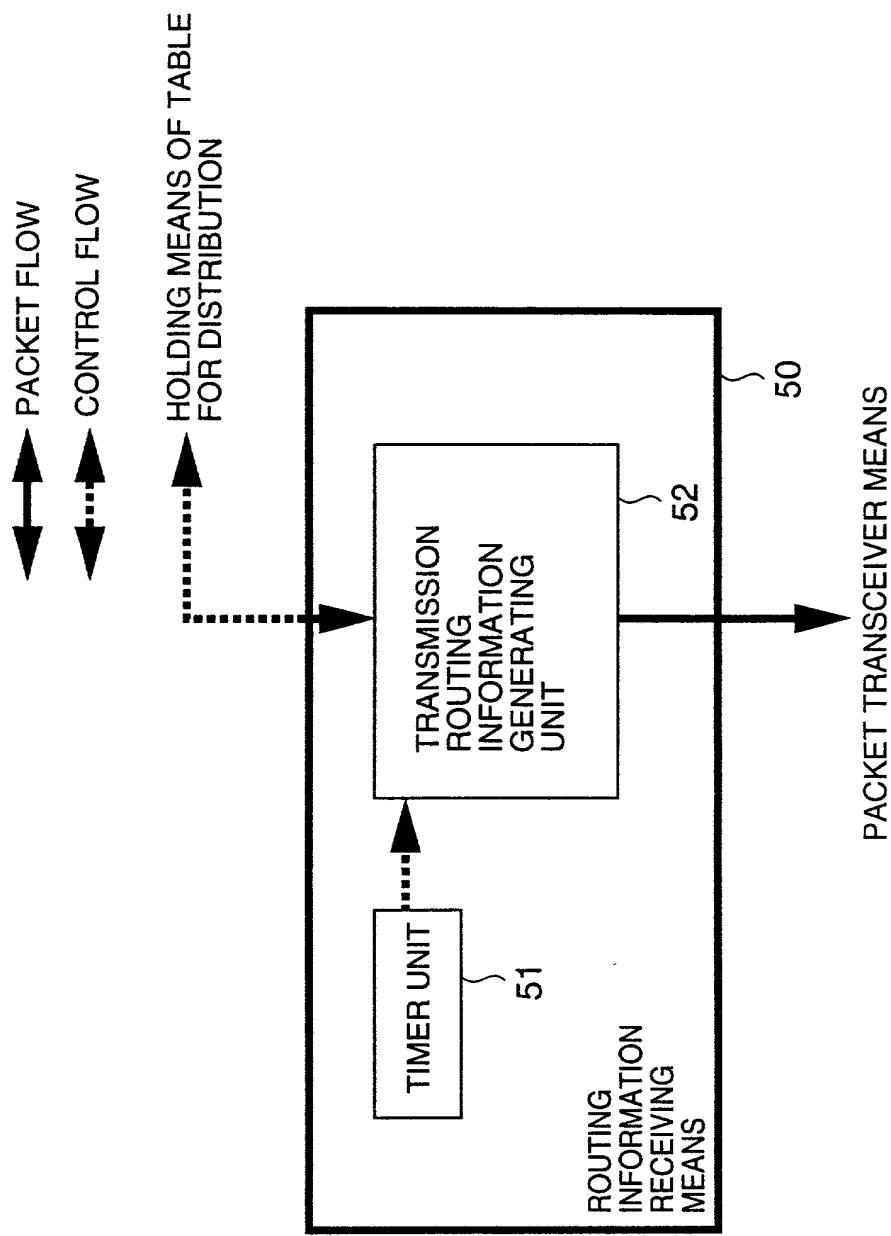


FIG.17

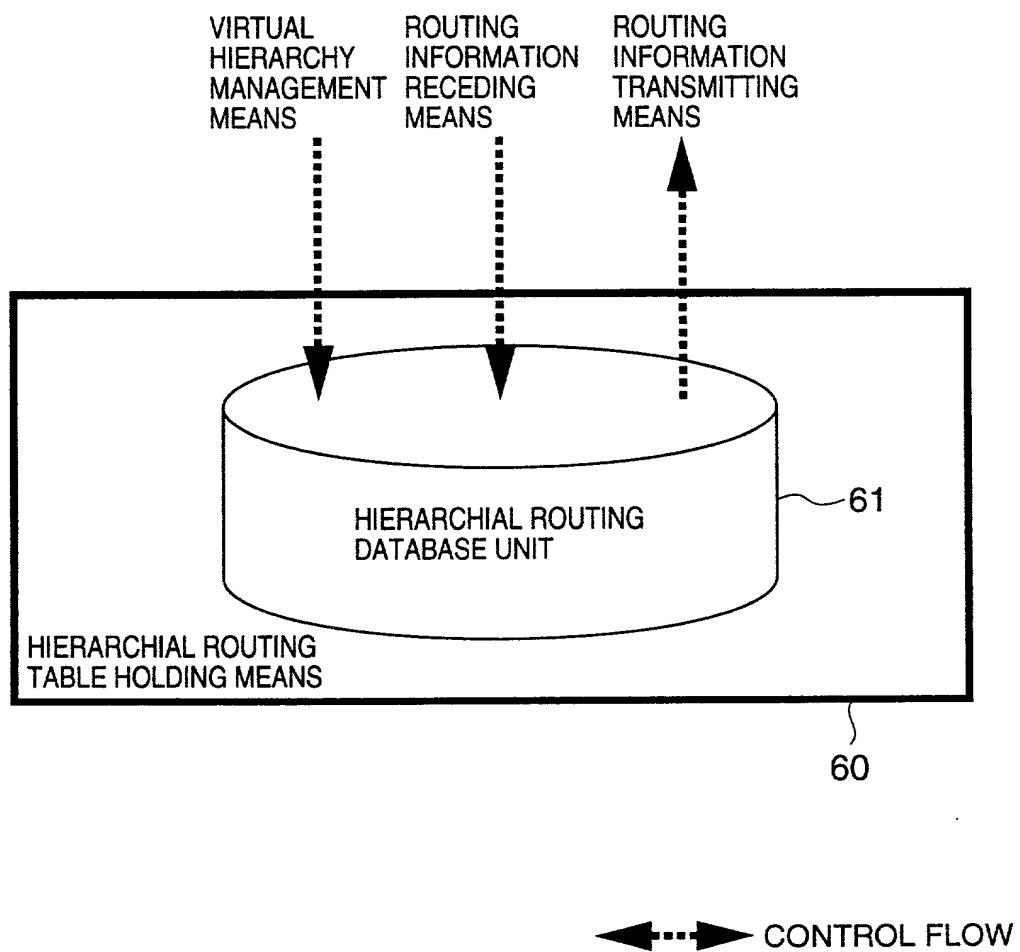
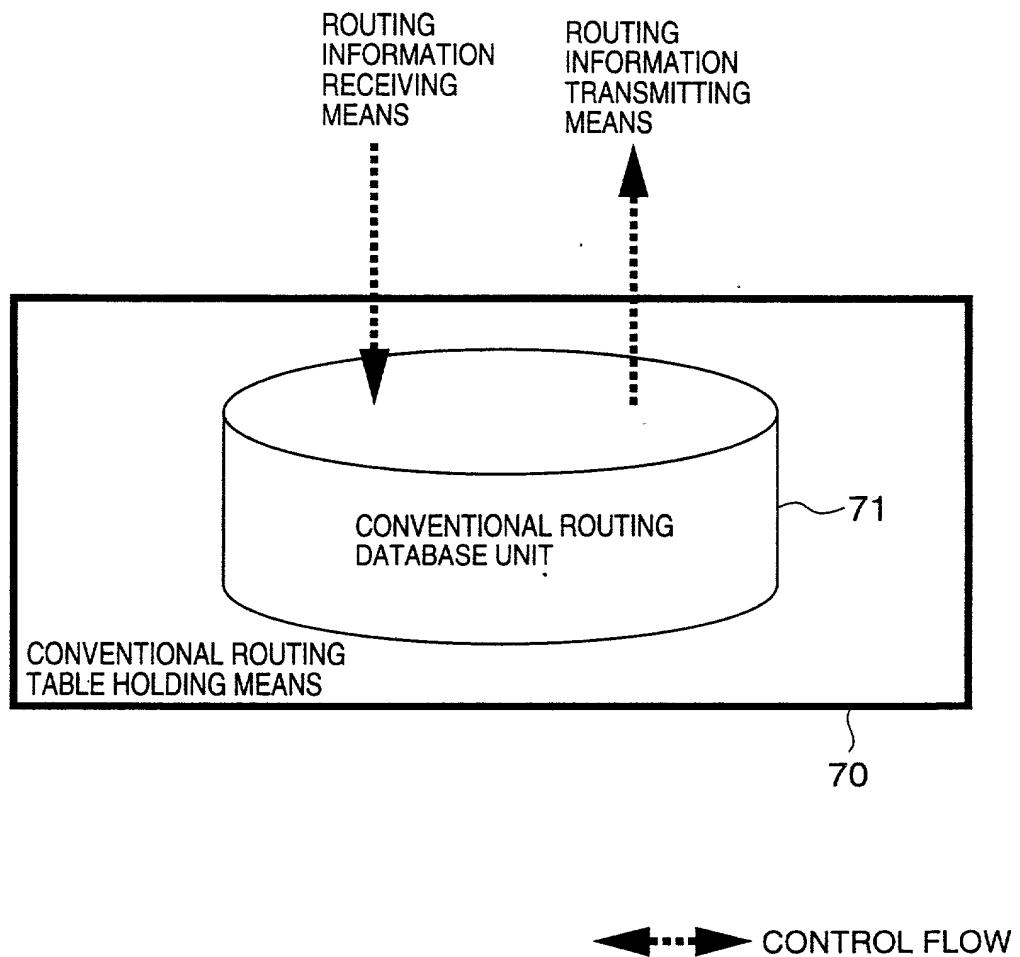
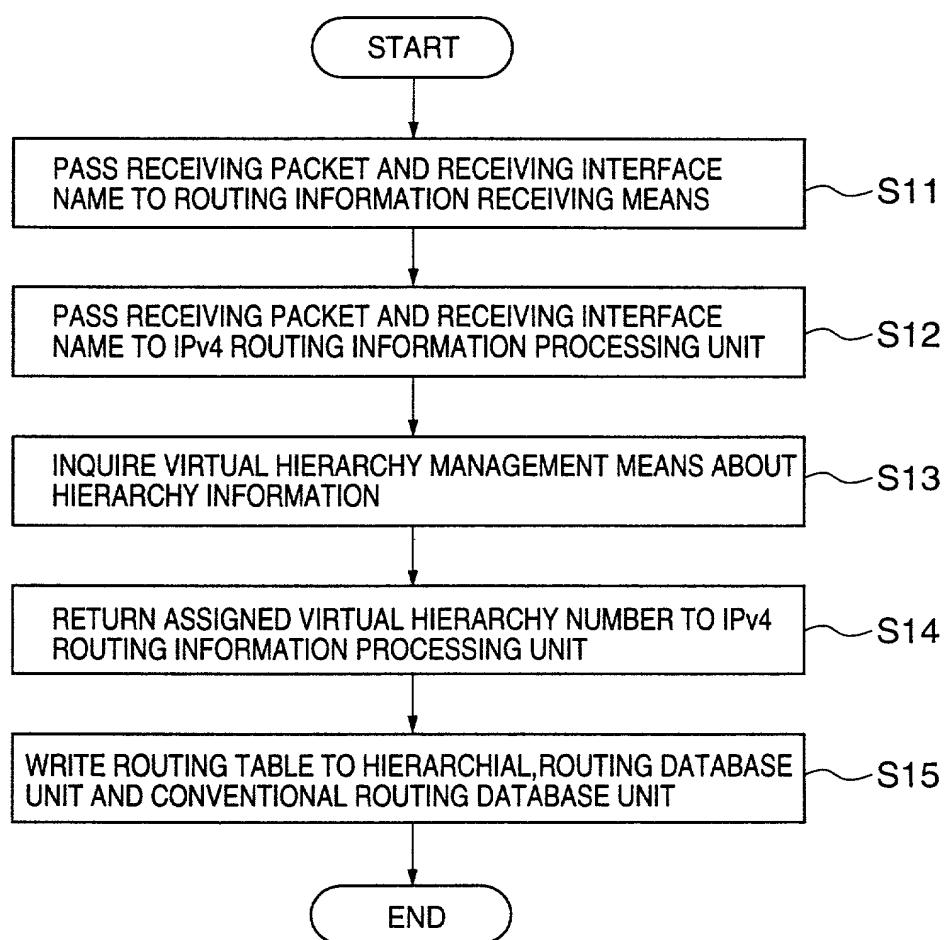


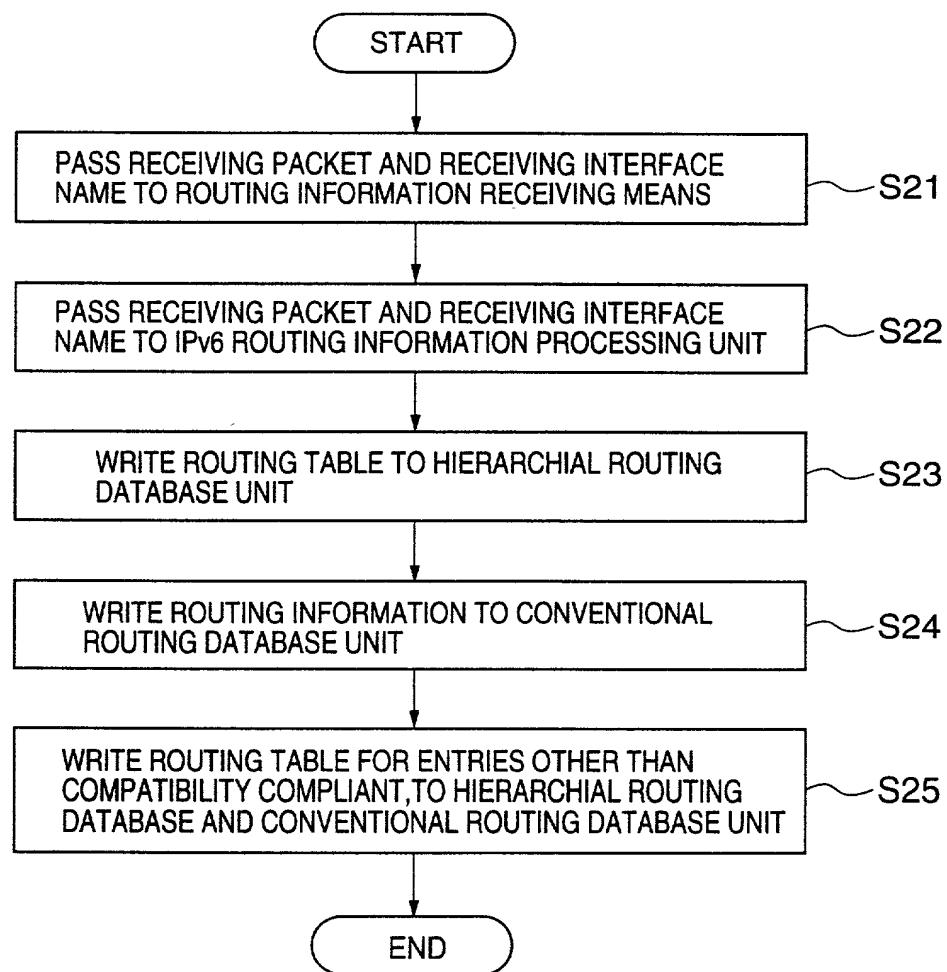
FIG.18



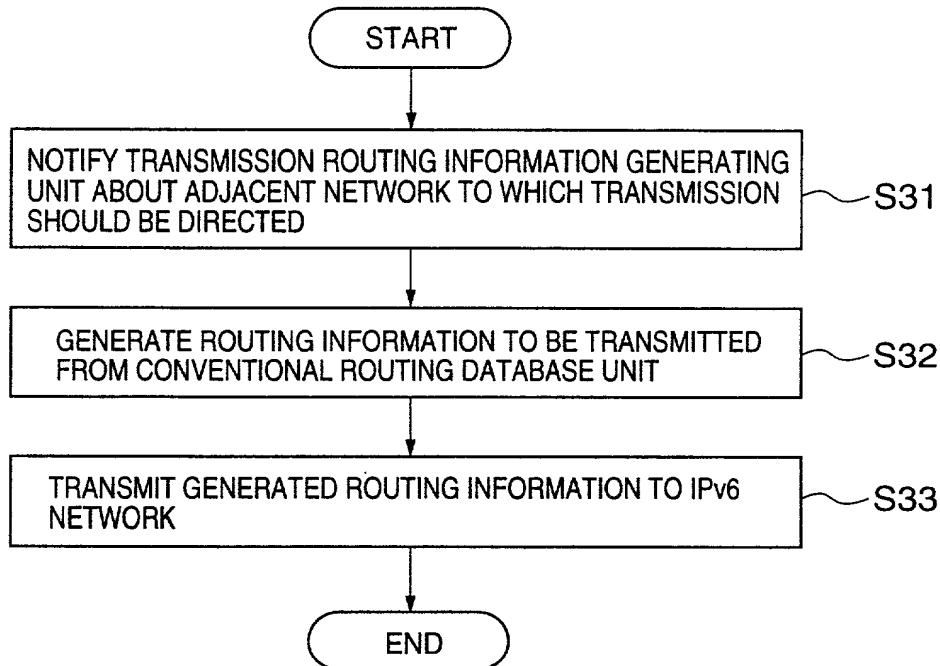
# FIG.19



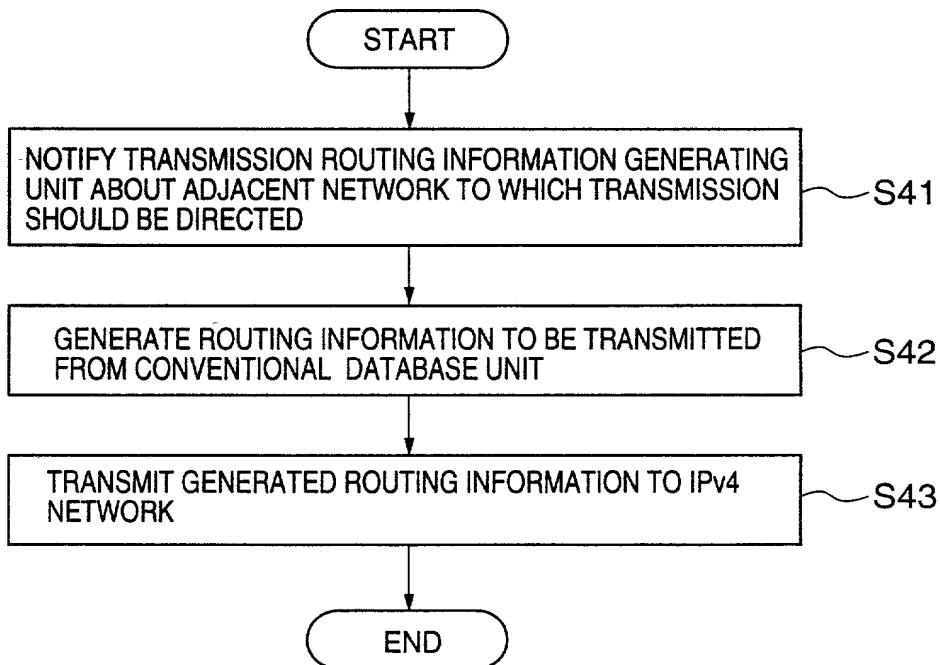
# FIG.20



## FIG.21



## FIG.22



# FIG.23

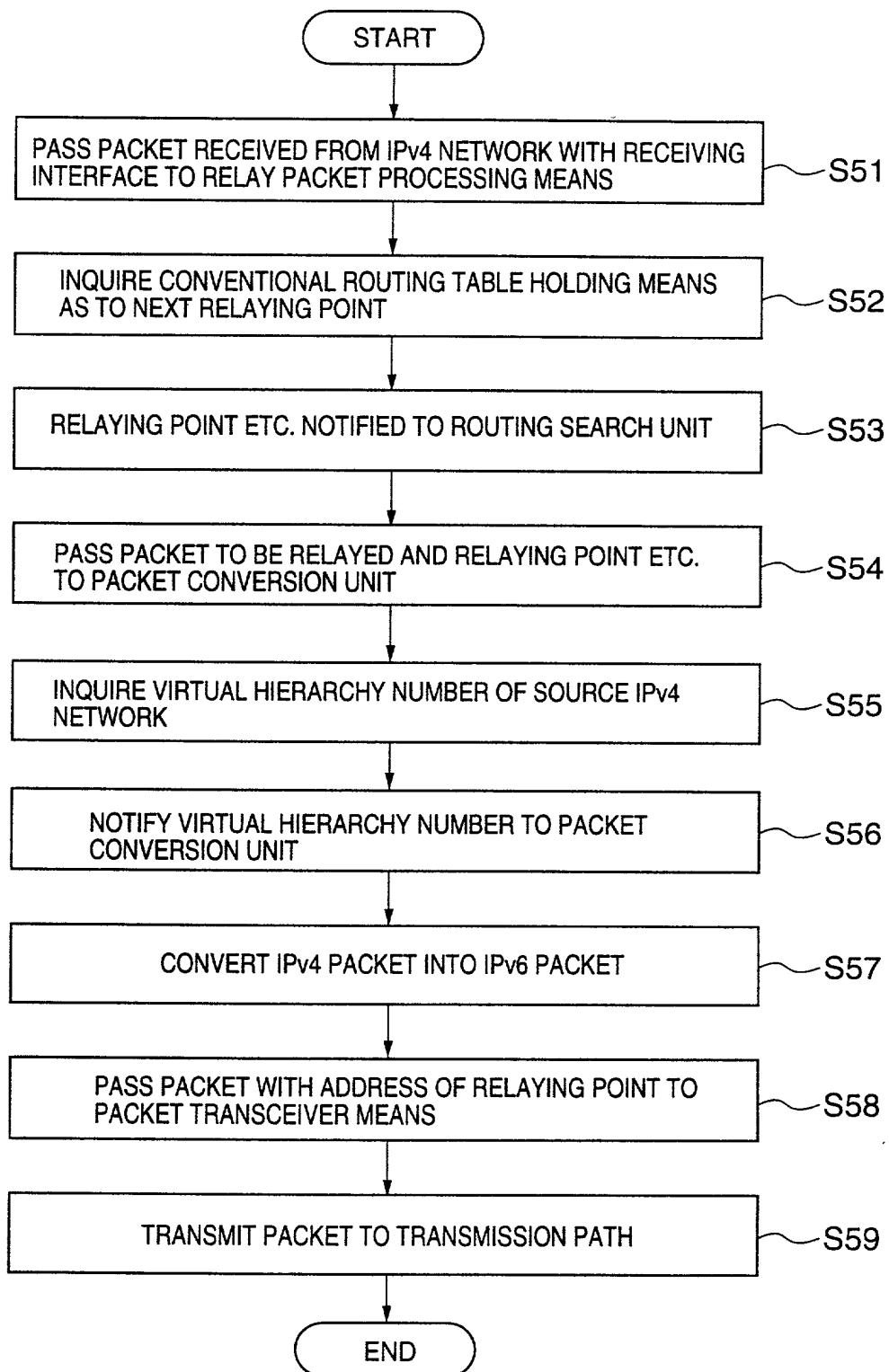
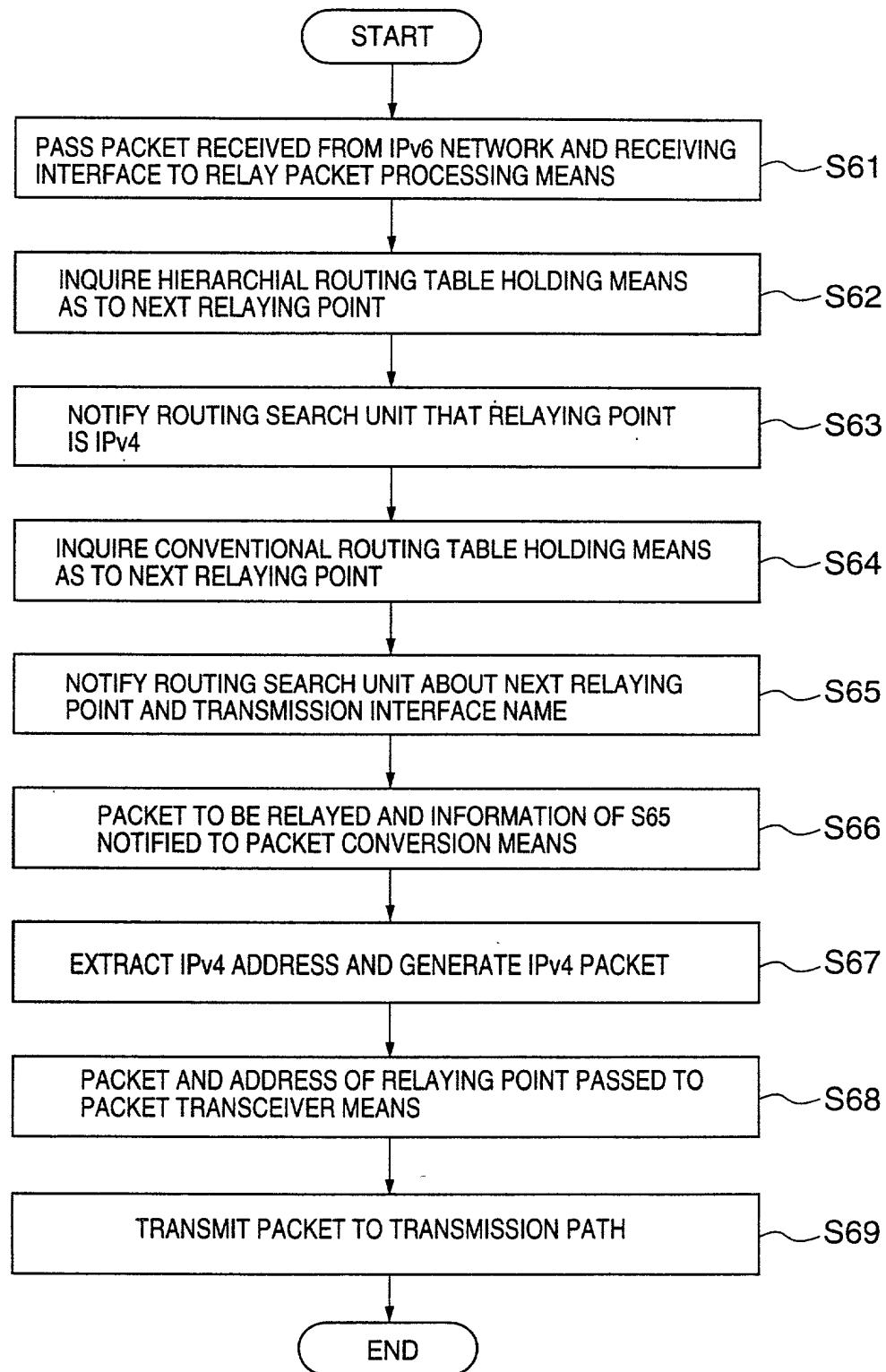


FIG.24



# FIG.25

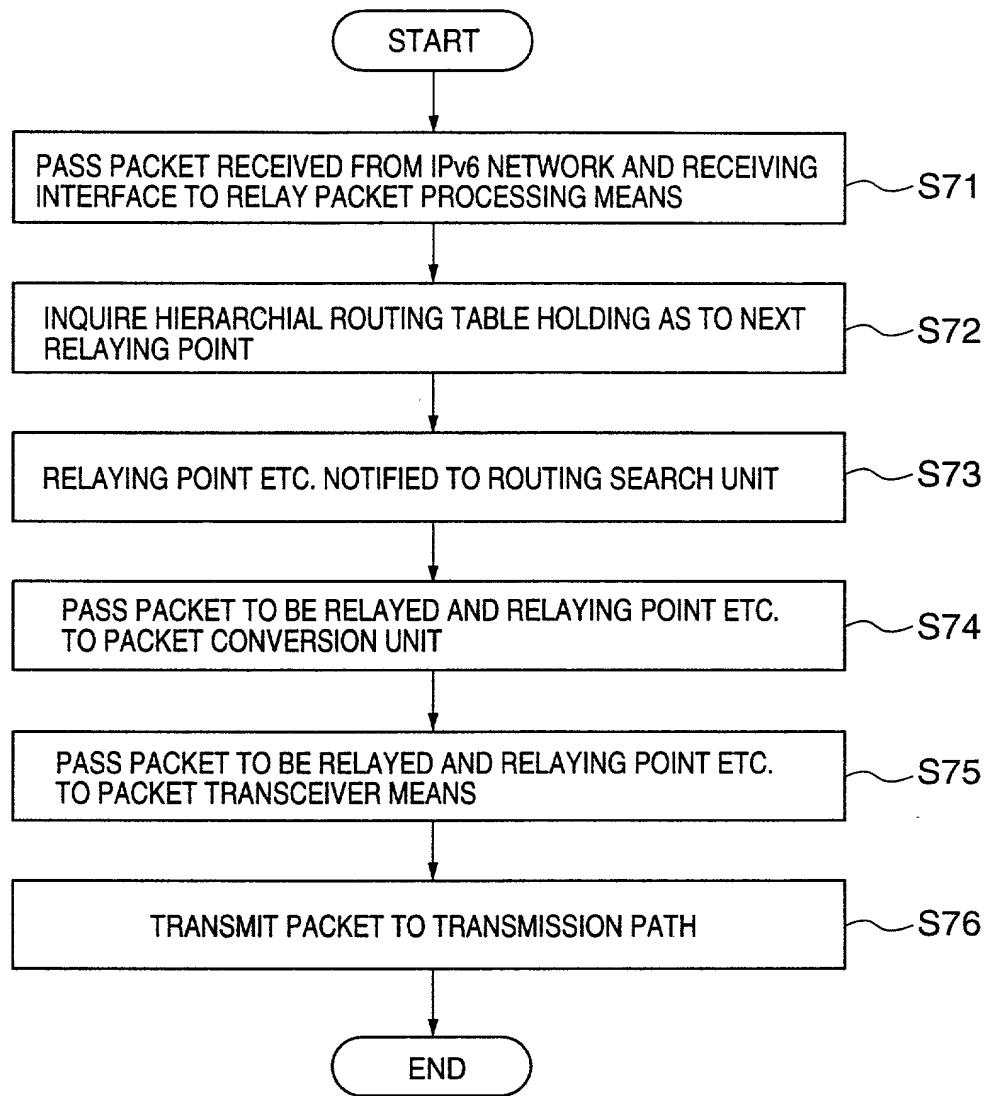
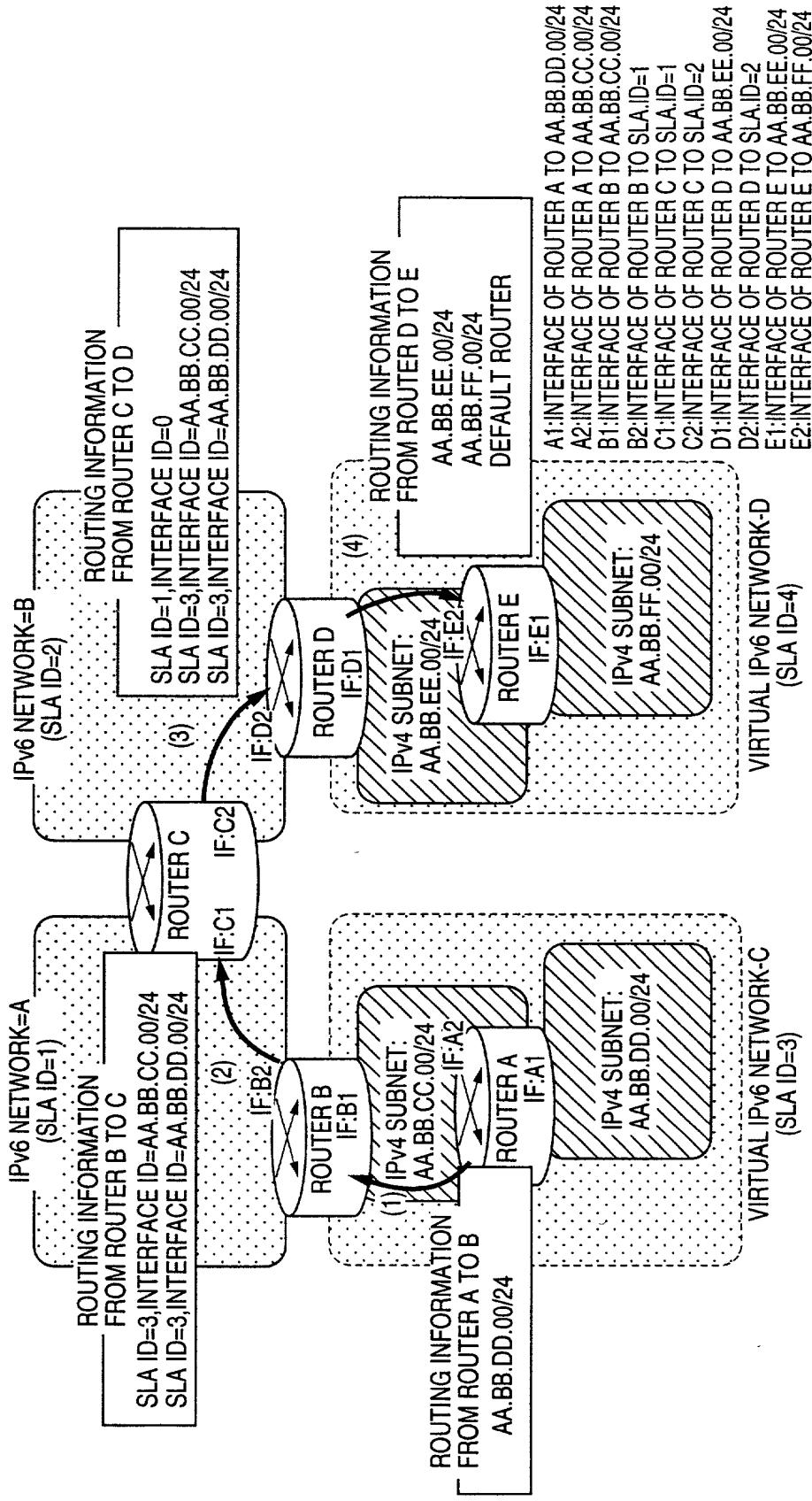


FIG. 26



## FIG.27

ROUTING TABLE OF ROUTER B

HIERARCHIAL ROUTING TABLE		CONVENTIONAL ROUTING TABLE	
ADDRESS	NEXT ROUTER	ADDRESS	NEXT ROUTER
SLA ID=3	IPv4	SLA ID=3	DIRECT(B1)
SLA ID=1	DIRECT(B2)	AA.BB.CC.00/24	DIRECT A(B1)
		SLA ID=3	
		AA.BB.DD.00/24	
		SLA ID=1	DIRECT (B2)

TRANSMISSION INTERFACE NAME IN PARENTHESIS

## FIG.28

TABLE GENERATED BASED ON  
ROUTING TABLE OF ROUTER C  
ROUTING INFORMATION FROM  
ROUTER B

HIERARCHIAL ROUTING TABLE		CONVENTIONAL ROUTING TABLE	
ADDRESS	NEXT ROUTER	ADDRESS	NEXT ROUTER
SLA ID=3	ROUTER B(C1)	SLA ID=3	ROUTER B(C1)
SLA ID=1	DIRECT(C1)	AA.BB.CC.00/24	
SLA ID=2	DIRECT(C2)	SLA ID=3	ROUTER B(C1)
		AA.BB.DD.00/24	
		SLA ID=2	DIRECT A(C2)
		SLA ID=1	DIRECT (C1)

TRANSMISSION INTERFACE NAME IN PARENTHESIS

# FIG.29

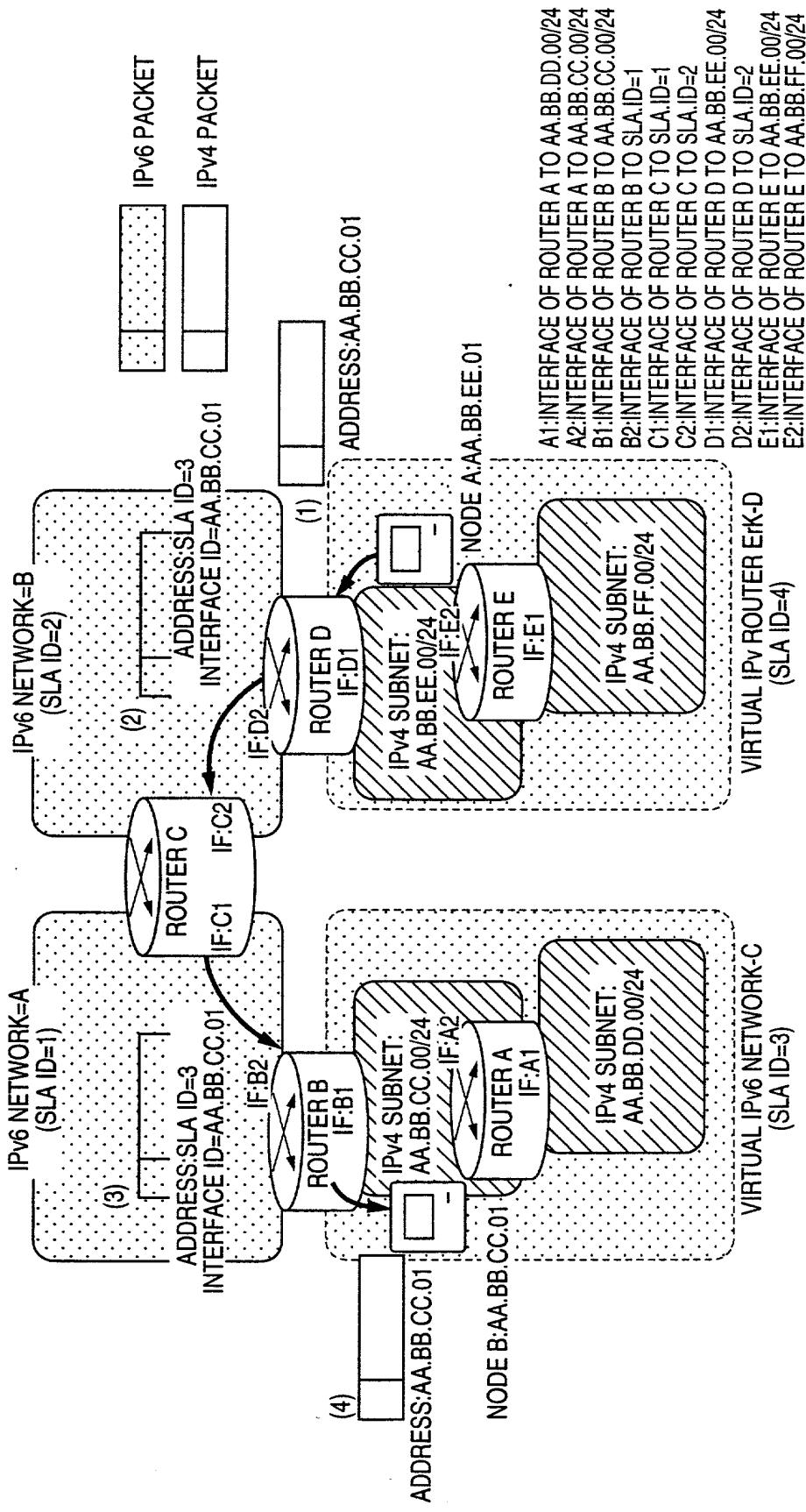
ROUTING TABLE OF ROUTER D

TABLE GENERATED BASED ON  
ROUTING INFORMATION FROM  
ROUTER C

HIERARCHIAL ROUTING TABLE		CONVENTIONAL ROUTING TABLE	
ADDRESS	NEXT ROUTER	ADDRESS	NEXT ROUTER
SLA ID=3	ROUTER C(D2)	SLA ID=3	ROUTER C(D2)
SLA ID=1	DIRECT C(D2)	AA.BB.CC.00/24	
SLA ID=2	DIRECT(D2)	SLA ID=3	ROUTER C(D2)
SLA ID=4	IPv4(D1)	AA.BB.DD.00/24	
		SLA ID=1	ROUTER C(D2)
		SLA ID=2	DIRECT(D2)
		SLA ID=4	DIRECT(D1)
		AA.BB.EE.00/24	

TRANSMISSION INTERFACE NAME IN PARENTHESIS

FIG.30



# FIG.31

ROUTING TABLE OF ROUTER D

████████ MATCHED ENTRY IN  
██████ ROUTING SEARCH

HIERARCHIAL ROUTING TABLE		CONVENTIONAL ROUTING TABLE	
ADDRESS	NEXT ROUTER	ADDRESS	NEXT ROUTER
SLA ID=3	ROUTER C(D2)	████████	████████
SLA ID=1	ROUTER C(D2)	██████	██████
SLA ID=2	DIRECT(D2)	██████	██████
SLA ID=4	IPv4(D1)	██████	██████

TRANSMISSION INTERFACE NAME IN PARENTHESIS

# FIG.32

ROUTING TABLE OF ROUTER C

HIERARCHIAL ROUTING TABLE		CONVENTIONAL ROUTING TABLE	
ADDRESS	NEXT ROUTER	ADDRESS	NEXT ROUTER
SLA ID=3	ROUTER B(C1)	████████	████████
SLA ID=1	DIRECT(C1)	██████	██████
SLA ID=2	DIRECT(C2)	██████	██████

TRANSMISSION INTERFACE NAME IN PARENTHESIS

# FIG.33

ROUTING TABLE OF ROUTER B

HIERARCHIAL ROUTING TABLE		CONVENTIONAL ROUTING TABLE	
ADDRESS	NEXT ROUTER	ADDRESS	NEXT ROUTER
SLA ID=3	IPv4	SLA ID=3	DIRECT(B1)
SLA ID=1	DIRECT(B2)	AA.BB.CC.00/24	ROUTER A(B1)
TRANSMISSION INTERFACE NAME IN PARENTHESIS			
AA.BB.DD.00/24		SLA ID=1	DIRECT(B2)